



#### **Smart features**

#### Smart sensing

Monitoring of key components enables predictive diagnostics and precision control

#### Smart transmission

Enhanced efficiency and convenience in data transmission with remote data burning and transmission

#### Smart control

Flexible power control and self-adjustment guarantees maximum output of the entire wind farm

### **Industry-leading adaptability**

#### • Environment adaptability

Flexible power control

#### • Maintenance adaptability

Dual circuit design of electrical system enables partial operation when one circuit is compromised, thus improving MTBF

#### • Construction adaptability

Individual blade assembly to conserve site space

GW155-4.5MW

**PMDD Smart Wind Turbine** 



Please scan QR code

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## **GW 155-4.5MW**

# **PMDD Smart Wind Turbine**

Operating parameters		
Rated power	MW	4.5
Wind turbine class	IEC	III B/S
Cut-in wind speed	m/s	2.5
Rated wind speed	m/s	10.8
Cut-out wind speed	m/s	26
Design service life	Year	≥ 20
Operating temperature	°C	-30℃ ~ +45℃,
Survival temperature	${\mathbb C}$	-40℃ ~ +50℃
Rotor system		
Rotor diameter	m	155
Swept area	m <sup>2</sup>	18869
Generator		
Туре	\	Permanent magnet synchronous generator
Rated voltage	V	740
Converter		
Туре	\	Full power converter
Power factor regulation range	\	Capacitive 0.9 - inductive 0.9
Rated output frequency	Hz	50/60

Rated output voltage	V	690
Brake system		
Aerodynamic brake system	\	Aerodynamic brake via feathering
Mechanical brake system	\	Generator hydraulic brake (for maintenance)
Yaw system		
Type/Design	\	Motor-driven/Four-stage planetary gear reducer
Yaw brake	\	Hydraulic brake
Control system and lightnin	g prote	ection
Туре	\	PLC control system
Lightning protection design standard	\	IEC61400/24-2010 \ IEC62305-2010 standards
Lightning protection strategy	\	Integrated lightning protection system for the turbine (GL certification standards)

Tower
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Туре	\	Steel tower
Hub height	m	95/110/140 (project specific)

- 1. Generator cooling system
- 2. Wind sensors
- 3. Hoist
- 4. Yaw system
- 5. Nacelle base
- 6. Nacelle cover
- 7. Generator stator
- 8. Generator rotor
- 9. Hub
- 10. Blade
- 11. Pitch system
- 12. LIDAR

